ment of the limbs in twenty-five cases of knee-joint disease. The result of these measurements leads Mr. Wagstaffe to think that important aids to prognosis and diagnosis may be obtained by careful attention to them. He thinks that from the limited number of cases he has observed the following conclusions may be formulated: 1. Long-standing disease, in the young and quickly growing, is frequently attended with change in the length of the limb; 2, lengthening of the femur or tibia is more common than shortening; 3, lengthening is most commonly found in the femur; 4, lengthening of one bone may, or may not be, accompanied with lengthening of the other; 5, usually only one bone is affected; 6, in the femur the lengthening varied in his cases from .6 cm. to 3.1 cm., and that in those cases where it existed at all it amounted to an average of 2 cm.; 7, marked alteration in the length of the bone may be regarded as presumptive evidence of disease in it; 8, increased length indicates active inflammatory disease near the epiphyseal line and that when no change of length follows long-standing disease, the affection is probably synovial; 9, the permanence of these changes in length is at present only conjectural, and, 10, that careful measurements will aid in localizing the disease, and in diagnosing its character in young and growing subjects.

We agree with Mr. Wagstaffe in thinking that the number of cases as yet observed with reference to this question are too few to safely base generalizations upon, and while his paper is suggestive we think the normal difference between the two sides of the body, and especially of the lower limbs, shown to exist by the examinations of Hunt, Cox, Wight and Hamilton, is a factor which seriously interferes with estimates based upon such slight differences as 1 or 2 cm. S. A.

Art. XXXVI.—*A Manual of Medical Jurisprudence.* By ALFRED SWAINE TAYLOR, M.D., F.R.S., Eighth American, from the tenth London Edition; *edited with additional notes and references*, by JOHN J. REESE, M.D., Prof. of Med. Jurisp. and Tox. in Univ. of Penna., etc. 8vo. pp. 933. Philadelphia: Henry C. Lea's Son & Co., 1880.

THE American editions of this standard manual have for a long time laid claim to the attention of the profession in this country; and that the profession has recognized the claim with favour, is proven by the call for frequent new editions of the work. This one, the eighth, comes before us as embodying the latest thoughts and emendations of Dr. Taylor, upon the subject to which he devoted his life, with an assiduity and success, which made him *facile princeps* among English writers on Medical Jurisprudence; we regard it as a gratifying evidence of the growing community of aim and interest, which should bind together the mother country and her growing child, that Dr. Taylor should have expended his latest labours in helping to make this foreign edition of his work more perfect. Indeed, despite the prominence which French and German scientists have deservedly attained, no writer can hope to have so many readers as he who writes in the English tongue, and it is this fact which has made the name of Alfred Swaine Taylor as well known in America as in the country which gave him birth.

Of the character of a book so well and favourably known, it is hardly worth while to speak. Both the author and the book have made a mark too deep to be affected by criticism, whether it be of censure or praise. In this case, however, we should only have to seek for laudatory terms, for though it is incompatible with human nature that two minds should think exactly alike, yet it would be impossible for any candid mind to deny that Dr. Taylor has well accomplished the end he had in view, when preparing this volume.

The practitioner of medicine will find in this condensed work of Dr. Taylor, most invaluable hints, which will stand him in good stead, when called to undergo the ordeal he is sure to meet with, when summoned to appear before a court as a medical witness; and the student who makes himself thoroughly conversant with its details and teachings, may safely assume that he is entitled to be considered a medical jurist, in the strictest sense of the term. Although somewhat abridged from the larger work of Dr. Taylor, in this manual will be found a reference to every thing which can well be regarded as coming within the domain of medical jurisprudence.

Indeed, with successive editions, the "manual" has had such considerable additions made to it, that, upon such a cursory comparison of the two books as we have been able to make, it would seem that the contents of the one, is very nearly equal to that of the other. Then this edition of the manual, has the advantage of having received the author's latest emendations prepared for it, and therefore contains more recent references, and some cases which are not contained in the larger "treatise." The American edition has also the immense advantage of the notes and additions of Professor Reese, together with those of the earlier editors. The editing of other men's writings, is a work requiring both knowledge and discretion, that sufficient may be added to make the book supply the wants of that portion of the public for which it is designed, and yet, that the additions should not be so excessive as to overshadow the original work. It seems to us that Dr. Reese has struck the happy medium, and while the knowledge he is so well known to possess, is shown by the fitness of the notes he has inserted in the text, his discretion is equally shown by their moderate number. In view of the many excellencies, and the comprehensiveness of this book, we are inclined to call in question the wisdom of calling it a "manual" as is done upon the title page. In its pages almost every subject ordinarily met with in works on medical jurisprudence is treated of, while many of them are exhaustively considered, and it would therefore seem justly entitled to the more pretentious name of Treatise.

While we have so much to say in favour of this volume, we think it right to add that in our judgment there is too much law in it for medical readers. The medical expert is not a lawyer, and the attempt to consider his subject from a legal standpoint is very likely to involve him in great difficulties. It is much safer to keep to his own proper province as a skilled medical observer, than to attempt to guide himself by his own knowledge of law, which at best must be superficial. Let the reader of this volume impress upon his mind the facts recorded by its author, with the conclusions he has deduced from them, and he will certainly find them of the greatest service in any medico-legal case in which he may be called upon to bear a part.

The opinions and decisions of Dr. Taylor, being the result of a most extended experience, aided by mature and well balanced judgment, are in every way entitled to be considered as authoritative, and though opposing counsel may quote the various views of other authors, yet an opinion which can be supported by a reference to this volume, must have much weight, and can never be justly treated with contempt.

In conclusion we must again express our sense of the admirable way in which Dr. Reese has edited the volume—and when we add that it is issued in the best style of its well known publishers, and clothed in the attractive half Russia binding, recently adopted by them, we feel that we have said enough to commend it to the attention of our readers. S. A.

ART. XXXVII.—*Traité de Chimie Biologique.* Par M. AD. WURTZ, Membre de l'Institut, etc. Part I. Paris: G. Masson. *Treatise on Chemical Biology.* By AD. WURTZ.

THIS book, the first part of which has recently appeared, gives in extension the lectures delivered by the author in the Faculty of Medicine of Paris. Its aim is to trace, as far as possible, the complex organic compounds elaborated by vegetables from mineral matters, through the various transformations which they undergo in the animal body, until they are finally destroyed and again returned to the air and soil.

It is written in M. Wurtz's clear and vigorous style, so that the average student may read with interest, subjects for the comprehension of which an extended knowledge of chemistry would be required. We give some abridged extracts.

After describing the various properties of chlorophyl, by which plants are enabled to decompose and derive nourishment from carbonic acid gas and water, the philosophy of this property is thus summed up.

> "Chlorophyl in solution differs essentially from solid chlorophyl, such as is contained in living plants, by the absence, in the latter, of the fluorescence which characterizes the former; the absorption of light being the same in both kinds of chlorophyl, it may be said that there is an excess of radiation, and consequently of energy, in the chlorophyl in solution which is inactive physiologically. While it lives and acts in the living leaf, the chlorophyl can expend this excess of energy, and can, in the form of affinity, transfer to the atoms of carbon and oxygen, set free from the carbonic acid, the energy existing in the form of vibratory movement in light rays."

The energy thus derived from the sun by plants is expended by animals in the form of heat and motion.

> "The respiratory combustion would communicate to the organism a quantity of heat superior to that which is really manifested in any given time. This excess of energy is exerted in another form. It is consumed in the voluntary and involuntary movements made by the animal. It is converted into mechanical force. Modern physics regards the heat of any body as a mode of motion of its molecules, and it may be conceived that the sum of the individual motions of the molecules, the effect which we call heat, can be transformed into one movement of the mass."

The albuminoid bodies are well described in about one hundred pages. Many of the described varieties of albumen are shown to depend probably —certainly in some cases—on imaginary differences. The classification of the albuminoid bodies here adopted seems remarkably clear and well arranged. The bodies are classed as follows: soluble albumen and serine (serum albumen); coagulated albumen; fibrin; globulines, including fibrino-